

REMARKS

The Applicant appreciates the Examiner's careful examination of this case. Reconsideration and re-examination are respectfully requested in view of the instant remarks.

In paragraph 1 of the Office Action, the Examiner says that the amendment filed 12/20/2004 added subject matter in that it referred to a suction chamber positioned between the valve plate and the cylinder head. The applicant respectfully disagrees with this objection. More specifically, the original disclosure in the published PCT Patent Specification ^{on which the present application is based} at page 3 line 17 – page 4 line 14 clearly refers to a valve plate 7. The valve plate 7 is shown in the drawing as originally filed. Thus a valve plate is clearly disclosed. Page 3 lines 19 – 20 refer to a cylinder block 5 and a cylinder head. The cylinder block 5 was shown in the drawing as originally filed. The cylinder head was not shown in the drawing as originally filed and this has been shown in the amended drawing. It is respectfully submitted that any person seeing a reference to a piston 3 reciprocating in a cylinder 4 in a cylinder block 5 would automatically understand that a cylinder head was required to be present. The cylinder head was referred to in the original description, and the applicant has simply shown the cylinder head in the amended drawing in order to try and illustrate more clearly the differences between the applicant's invention and the two cited prior patents.

With regard to the term "a suction chamber", reference is respectfully made to page 3 lines 22 – 25 of the published PCT Patent Specification. There is a reference to an inlet side and a discharge side. There is also a statement

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that, for simplicity of illustration, the discharge side has not been shown in the drawing. Thus the drawing shows the inlet side. Page 3 line 26 – page 4 line 3 says that the inlet side is provided with the valve plate assembly 9 comprising the reed 11, the port 13 and the damper means 15, all of which are shown in the originally published patent specification. Page 5 line 2 of the originally published PCT Patent Specification refers to the port 13 as being the suction port 13. Page 5 lines 2 – 6 state that the refrigerant is able to flow into the suction side of the valve plate 7 with a much smoother flow than would be the case if the damper means 15 were not employed. Tube 17 in the originally published PCT Patent Specification is shown and described (at page 4 line 11) as extending vertically above the port 13, which is the suction port. Thus, if the tube 15 extends vertically above the suction port 13, and if the drawing is stated to be showing the suction side of the invention (as is clear from page 3 lines 22 – 25 and page 5 lines 2 – 6) then it would be absolutely clear to a person skilled in the art that the tube 17 was extending into a suction chamber bounded by the stated valve plate 7 and the cylinder head.

With regard to paragraph 2 of the Office Action, the Examiner is respectfully requested to reconsider the disapproval of the amended drawing in the light of the above submissions.

With regard to paragraphs 3 and 4 of the Office Action, the Examiner has rejected claims 11 – 15 as including disclosure not originally filed, namely "a suction chamber positioned between the valve plate and the cylinder head". The Examiner is respectfully asked to reconsider this objection in the light of the above submissions.

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With regard to paragraphs 5 and 6 of the Office Action, the applicant was obliged to the Examiner for the detailed explanation of the Examiner's interpretation of JP 10-213077 and Becker et al (US 5, 275,541).

In order more clearly to distinguish over the above two citations, the applicant has proposed to amend claim 16 to specify that the port is positioned in the valve plate, and that the reed is positioned on a side of the valve plate which is communication with a cylinder of a piston and cylinder arrangement whereby the reed flexes into the cylinder when the reed opens the port. With this amendment of claim 16, it will immediately be apparent from Figure 1 of Becker et al that the Becker et al construction is completely different to the applicant's construction. The Becker et al inlet suction reed valve 25 closes a port 21 in a part 6. The part 6 is not a valve plate and it would seem to be more like a cylinder head. The Becker et al reed valve 25 is not positioned on the side of the Becker et al part 6 which closes the Becker et al cylinder 13 of the Becker et al piston and cylinder arrangement 7, 13. It is the Becker et al part 4 which closes the piston and cylinder arrangement, and this part 4 does not have a reed valve for the port 23.

Similarly, JP 10-213077 clearly has a reed valve 5 covering a suction hole 2, but the suction hole 2 seems to be in what is called a check valve unit 4. It is not clear that this check valve unit 4 is a valve plate, and even if it were to be a valve plate, then the reed valve 5 is not positioned on a part of the check valve unit 4 which closes a cylinder of a piston and cylinder arrangement. In JP 10-213077, it is noted that the part 1 is referred to as a casing, which seems to imply that the suction pipe 8 extends simply to the environment outside of the casing 1. It is respectfully submitted that a considerable degree of hindsight is

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9
required in order to read JP 10-213077 such as to arrive at anything like the applicant's design as shown in the amended drawing and as claimed in the amended claim 16. All JP 10-213077 discloses is a check valve arrangement for use in a non-illustrated diaphragm-type pump. Self-evidently, JP 10-213077 is not directed towards damper means for mechanically damping motion of the reed.

Accordingly, it is respectfully submitted that this application is in condition for allowance. Early and favorable action is respectfully requested.

If for any reason this RESPONSE is found to be INCOMPLETE, or if at any time it appears that a TELEPHONE CONFERENCE with Counsel would help advance prosecution, please telephone the undersigned or one of his associates, collect in Waltham, Massachusetts, at (781) 890-5678.

Respectfully submitted,

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